CLAIMS

What is claimed:

1. A vessel agitator assembly for a chemical analyzer, comprising:

a conveyor element which holds a plurality of vessels, said conveyor element being moveable along a path; and

a vessel agitator positioned adjacent said conveyor element at a location along said path where said plurality of vessels contact said vessel agitator as said conveyor element moves along said path.

2. The vessel agitator assembly for a chemical analyzer as recited in claim 1 wherein said vessel agitator includes a plurality of troughs and projections, whereby each of said plurality of vessels are caused to move in direction generally perpendicular to said path by said plurality of troughs and projections.

3. The vessel agitator assembly for a chemical analyzer as recited in claim 2, wherein vessel agitator is made from more than one component.

4. The vessel agitator assembly for a chemical analyzer as recited in claim 2, wherein distances between adjacent troughs in said vessel agitator is variable.

5. The vessel agitator assembly for a chemical analyzer as recited in claim 2, wherein distances between adjacent projections in said vessel agitator is variable.

6. The vessel agitator assembly for a chemical analyzer as recited in claim 2, wherein distances between adjacent troughs in said vessel agitator is uniform.

7. The vessel agitator assembly for a chemical analyzer as recited in claim 2, wherein distances between adjacent projections in said vessel agitator is uniform.

8. The vessel agitator assembly for a chemical analyzer as recited in claim 2, wherein a depth of troughs of said vessel agitator relative to said conveyor is variable.

9. The vessel agitator assembly for a chemical analyzer as recited in claim 2, wherein a distance said projections project toward said vessel agitator relative to said conveyor is variable.

10. The vessel agitator assembly for a chemical analyzer as recited in claim 2, wherein a depth of troughs of said vessel agitator relative to said conveyor is uniform.

11. The vessel agitator assembly for a chemical analyzer as recited in claim 2, wherein said agitator assembly has a same number of bumps as a number of vessel holders of said conveyor element.

12. The vessel agitator assembly for a chemical analyzer as recited in claim 2, wherein a distance said projections project toward said vessel agitator relative to said conveyor is uniform.

13. The vessel agitator assembly for a chemical analyzer as recited in claim 1, wherein said vessel agitator is stationary.

14. The vessel agitator assembly for a chemical analyzer as recited in claim 1, wherein a height of said vessel agitator relative to a height of said conveyor is adjustable.

15. The vessel agitator assembly for a chemical analyzer as recited in claim 1, wherein said path has one or more turns.

16. The vessel agitator assembly for a chemical analyzer as recited in claim 13, further comprising means for allowing the conveyor to follow a path which is nonlinear.

17. The vessel agitator assembly for a chemical analyzer as recited in claim 1, further comprising a housing, said conveyor and said vessel agitator being positioned within said housing.

18. The vessel agitator assembly for a chemical analyzer as recited in claim 16, wherein said vessel agitator is affixed to said housing.

19. The vessel agitator assembly for a chemical analyzer of claim 16, wherein said housing is insulated.

20. The vessel agitator assembly for a chemical analyzer of claim 1, wherein said chemical analyzer is an immunoassay analyzer.

21. The vessel agitator assembly for a chemical analyzer of claim 19, wherein said conveyor and said vessel agitator are positioned within an incubator in said immunoassay analyzer.

22. A method of passively agitating vessels in a chemical analyzer, comprising the steps of:

conveying one or more vessels held in a conveyor element along a path; and

agitating said vessels with a vessel agitator positioned adjacent said conveyor element at a location along said path where said plurality of

vessels contact said stationary vessel agitator as said conveyor element moves along said path.